L2 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1995:187187 CAPLUS
DN 122:25815
ED Entered STN: 12 Nov 1994
TI **Imidacloprid** - a new systemic insecticide.
AU Elbert, A.; Becker, B.; Hartwig, J.; Erdelen, C.
CS Geschaftsbereich Pflanzenschutz Entwicklung/Insektizide, Bayer AG, Leverkusen, 5090, Germany
SO **Pflanzenschutz**-Nachrichten Bayer (German Edition) (1991), **44**(2), 113-36
CODEN: PNBYAT; ISSN: 0340-1723
PB Bayer AG
DT Journal
LA German
CC 5-4 (Agrochemical Bioregulators)
AB The biol. profile of **Imidacloprid** (I) was defined on the basis of the results of exhaustive laboratory expts. and greenhouse trials. I is extremely effective against sucking insects, such as rice leafhoppers, aphids, thrips and mealybugs, and very effective against whitefly. It is also effective against some species of biting insects, such as paddy stem borers and Colorado beetle, but it has no effect on nematodes or spider mites. At comparatively high doses it kills adult insects and has ovicidal effects. I is a nicotinic acetylcholine receptor stimulator. Its mechanism of action differs from that of conventional insecticides. It therefore gives excellent control of all resistant populations investigated hitherto. I has a pos. temperature coefficient After foliar application, it has a good residual action, it is highly photostable and it shows satisfactory resistance to rain. I is active after oral ingestion and by direct contact, but it is not active in the vapor phase. The LD95 after oral ingestion by Myzus persicae is .apprx.**2** pg/aphid. After topical application it is .apprx.160 pg/aphid. It has not been possible to demonstrate recovery of injured aphids, or antifeeding effects. I has a faster action against aphids than oxydemeton-Me. After foliar application, I shows good translaminar and acropetal translocation, so it is also likely to provide effective control of pests with a furtive lifestyle, and protect the parts of the plant which regenerate after treatment. By virtue of its good contact action and powerful systemic action after uptake through the root system, I can be applied to soil and used as a seed dressing. It gives excellent control of pests such as onion maggots, Diabrotica, wire worms, termites and fire ants which live in the soil, and of insects such as aphids which live above ground level. It has a good residual action after application to the soil and when it is used as a seed dressing. The compatibility of I with plants is good after use as a seed dressing, as a soil treatment and after foliar application. By virtue of its biol. properties, I is likely to have a wide range of uses for controlling economically important pests of rice, cotton, cereals, maize, sugar beet, potatoes, vegetables, citrus fruit, pome and stone fruit and other crops.
ST VVImidacloprid systemic insecticide
IT Insecticides
(**Imidacloprid** as systemic insecticide)
IT 138261-41-3, **Imidacloprid**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(**Imidacloprid** as systemic insecticide)

L2 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:712564 CAPLUS
DN 121:312564
ED Entered STN: 24 Dec 1994
TI The molecular and crystal structure of **imidacloprid** (phase **2**)
AU Born, L.

CS Zentrale Forschung, Bayer AG, Leverkusen, 5090, Germany
SO **Pflanzenschutz**-Nachrichten Bayer (German Edition) (1991), **44**(2), 137-**44**
CODEN: PNBYAT; ISSN: 0340-1723
PB Bayer AG
DT Journal
LA German
CC 75-8 (Crystallography and Liquid Crystals)
AB The mol. and crystal structure of **imidacloprid** (phase **2**) were reported.
ST **imidacloprid** insecticide mol crystal structure; NTN 33893 insecticide mol crystal structure; mol crystal structure **imidacloprid** insecticide; polymorphism mol crystal structure **imidacloprid** insecticide
IT Crystal structure
Molecular structure
Polymorphism
(mol. and crystal structure of **imidacloprid** (phase **2**))
IT 138261-41-3, **Imidacloprid**
RL: PRP (Properties)
(mol. and crystal structure of **imidacloprid** (phase **2**))

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